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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,554	11/28/2003	Miki Sasaki	OKI 392	4972
23995	7590	06/19/2007		
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			EXAMINER ABEL JALIL, NEVEEN	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 06/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/722,554

Applicant(s)

SASAKI ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on March 21, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Remarks**

1. In response to Applicant's Amendment filed on March 21, 2007, claim 2 has been cancelled; claims 7-8 have been newly added. Therefore, claims 1, and 3-8 are pending in the application.

### ***Claim Objections***

2. Claims 1, and 3-8 are objected to because of the following informalities:

Claim 1, recite "for supplementing", and "for deciding" in lines 11, 12, and 14, which constitute intended use, never actually takes place, therefore renders any recitation claimed after not be given patentable weight. Claims should be amended to recite more direct and positive language such as "to", "which", "that", or "supplementing". Appropriate correction is required.

Claim 19, line 19, should recite the operator "AND" instead of "OR" as it was presented in Applicant's specification page 6 and also in claim 19, line 29. Both processes need to take place in order for the limitation to function.

Dependent claims 3-8 should all start with "The" instead of "A" to correct antecedent basis issues.

Claim 5, line, 5, recite “can be” which suggest optionally never having to take place thus the limitation following doesn’t carry patentable weight. Claims should be amended to recite affirmative language such as “is”, “are”, or “to be”. Correction is required.

Claims 3, and 4, recite an “if” statement which suggest optionally, passive recitation. If the Applicant intended to have the remaining limitations after the “if” statement to be considered fully and given complete patentable weight. The “if” recitation should be changed to recite more firm and definite language (i.e. “wherein” or “when” or by completing the statement by an “else” condition). Since “if” statement is optional, the remaining limitation does not necessarily have to happen (i.e. the presentation of document). Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps.

See MPEP § 2172.01. The omitted steps with respect to applicant’s specification Figure 6 are:

Claim 1, lines 21, recite “extracting means” but lacks the mention of extraction taking place using the execution by or in natural language as it is taught in Applicant’s specification page 7, lines 16-20. There appears to be missing steps related to extraction process. Clarification is required.

5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claim 7 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in recitations of preceding claims.

Claim 1 recite the record to include an incomplete numerical expression thus the assumption is made that the jest of the claimed invention is particularly to “numerical expressions” while newly added claim 7 now is disclosing the “record” to be a document” thus contradicting the basis for the preceding claims. Correction and/or clarification is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, and 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S. Patent No. 5,896,321) in view of Ikeno (U.S. Patent No. 6,128,635).

As to claim 1, Miller et al. discloses a numerical expression retrieving device for completing and retrieving a numerical expression comprising:

input means for inputting a record to be retrieved, the record containing an incomplete numerical expression (See column 5, lines 54-60, wherein “numerical expression” is read on “score”/“value”);

syntactic parsing means for parsing a syntactic structure of the inputted record (See column 6, lines 37-47);

an attribute dictionary which stores attribute information and unit system information therein, the attribute information including attribute names indicative of attributes, attribute contents indicative of meanings of the attributes, and basic units of measurements for supplementing omitted representations, the unit system information including prefixes for deciding omissions, and multiples indicative of meanings of the prefixes (See column 8, lines 22-38);

a co-occurrence word dictionary which stores therein information including attribute names indicative of attributes, and co-occurrence words for deciding the attribute names (See column 6, lines 21-29);

omission completion means for completing the incomplete numerical expression by adding by adding a basic unit of measurement to a prefix of in the inputted record by referring to the parsed syntactic structure and said attribute, or by further referring to said co-occurrence word dictionary (See column 5, lines 4-20, also see column 6, lines 21-29);

extraction means for extracting a word with the basic unit of measurement added to the prefix in the inputted record, as a retrieval keyword for the record after the completion of the incomplete numerical expression by the omission completion means (See column 16, lines 1-24);

a database which stores data therein (See column 8, lines 22-38); and

storage and retrieval means for storing the record with the incomplete numerical expression completed, the inputted record, and the extracted retrieval keyword in the database (See column 6, lines 59-67, and see column 7, lines 1-6);

wherein said omission completion means searches the inputted record for a numerical expression shortened to a prefix only, from within the inputted record by referring to the parsed syntactic structure and said co-occurrence word dictionary (See column 8, lines 53-67),

determines a co-occurrence word of one of the prefixes included in the unit system information on the basis of the parsed syntactic structure for the incomplete numerical expression (See column 16, lines 25-35), determines an attribute name of the prefix by referring to said co-occurrence word dictionary on the basis of the determined co-occurrence word, and adds the basic unit of measurement to the prefix in the inputted record by referring to said attribute dictionary on the basis of the determined attribute name (See column 15, lines 28-51).

Miller et al. teaches the claimed invention but does not explicitly teach a document database. However, Miller et al. teaches storage and dictionaries of entries in Figure 5, block 502.

Ikeno teaches document database (See Ikeno Figure 1, block 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Miller et al. by the teaching of Ikeno to include document database because it is well known in the art that storage and/or memory can be a document database.

As to claim 3, Miller et al. as modified discloses comprising:

output means (See Miller et al. Figure 1, 47, Display);

wherein said omission completion means decides whether or not the incomplete numerical expression in the inputted record is a numerical expression shortened to a prefix only, by referring to the parsed syntactic structure and said co-occurrence word dictionary, and if the

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incomplete numerical expression in the inputted record is indeed shortened to a prefix only, said omission completion means notifies a user to that effect by said output means and prompts the user to re-input a numerical expression (See Miller et al. column 6, lines 30-35, and see Miller et al. column 14, lines 20-37).

As to claim 4, Miller et al. as modified discloses comprising:

output means (See Miller et al. Figure 1; 47, Display);

wherein said omission completion means decides whether or not the incomplete numerical expression in the inputted record is a numerical expression shortened to a prefix only, by referring to the parsed syntactic structure and said co-occurrence word dictionary, and if the incomplete numerical expression in the inputted record is indeed shortened to a prefix only, said omission completion means presents basic units of measurement and attribute information by said output means and prompts a user to select one of the basic units measurement, and completes the incomplete numerical expression with the a basic unit of measurement selected by the user (See Miller et al. Figure 2A, Display with user selection, also see Miller et al. column 4, lines 35-52).

As to claim 5, Miller et al. as modified discloses wherein, if a basic unit of measurement for completing the incomplete numerical expression has not been selected, said omission completion means completes the shortened numerical expression with all basic units of measurement which can be added (See Miller et al. column 2, lines 56-60, and see Miller et al.



column , lines ).

As to claim 6, Miller et al. as modified discloses wherein said document storage and retrieval means retrieves a record whose retrieval keyword agrees with the incomplete numerical expression in the inputted record, from said document database, and outputs the retrieved record as a retrieved result by said output means (See Ikeno Figure 41, and see Ikeno column 16, lines 5-21).

As to claim 7, Miller et al. as modified discloses wherein the record comprises a document (See Ikeno Figure 1, block 2, block 3).

As to claim 8, Miller et al. as modified discloses wherein the record comprises a numerical expression (See Miller et al. column 5, lines 54-60, wherein “numerical expression” is read on “score”/”value”).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1, and 3-8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-Form 892 for list of cited references.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'N. Abel-Jalil', with a stylized flourish at the end.

Neveen Abel-Jalil  
June 11, 2007